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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,783

02/18/2004

Alex Krister Raith

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COATS & BENNETT, PLLC  
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EXAMINER

NGO, NGUYEN HOANG

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/780,783	<b>Applicant(s)</b> RAITH, ALEX KRISTER	
	<b>Examiner</b> NGUYEN NGO	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 42-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

This communication is in response to the pre-brief conference decision of 3/10/2009. Accordingly, Claims 42-55 are currently pending in the application.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 42-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funk (US 6169884), in view of Ohno (US 5848062), hereinafter referred to as Funk and Ohno.

**Regarding claim 42**, Funk discloses a transceiver in a radio communication system (apparatus for reducing power in radio transmitters, abstract) comprising:

a transmitter for transmitting data over an air interface at a transmission data rate (radio 101 of figure 1 consisting of antenna 113 that radiates an amplified transmission signal, col3 lines 30-40 and figure 1);

a temperature measuring device for determining a temperature of said transceiver (the thermistor 115 of figure 1, col3 lines 13-53); and

a processor (processor 109 of figure 1) coupled to said transmitter and said temperature measuring device, said processor configured to compare said measured temperature with a threshold temperature (a high temperature threshold, col3 lines 40-67) and selectively modify a transmit power level associated with transmitting the data from said transceiver based on said comparison (control transmission power by reducing the power level, col3 lines 46-67 and col4 lines 25-35).

Funk however fails to specifically disclose modifying a transmission data rate associated with transmitting the data from said transceiver based on said comparison. However in a very similar endeavor, Ohno discloses a wireless communication equipment for a remote station having a function for controlling a temperature in the equipment (col1 lines 4-10). Ohno further discloses;

selectively modify a transmission data rate associated with transmitting the data from said transceiver based on said comparison (when a temperature sensor senses that the temperature in the box is higher then a set temperature , the temperature control portion changes a transmission rate, col5 lines 40-50). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate

the concept of modifying the data rate as disclosed by Ohno, into the method and apparatus for reducing power in radio transmitters as disclosed by Funk, in order to have additional means for efficiently reducing the temperature of a transceiver.

**Regarding claim 43,** Funk discloses the transceiver of claim 42, further comprising an output device associated with said transceiver for providing an indication of said measured temperature (display 117 of figure 1, col3 lines 30-67).

**Regarding claim 44 and 45,** Funk discloses the transceiver of claim 42, wherein said processor is further configured to respond to transmit power control commands (col3 lines 30-37 and col4 lines 30-43).

**Regarding claim 46,** Ohno discloses the transceiver of claim 45, wherein said processor is further configured to request said transmission data rate reduction prior to implementing said transmission rate reduction (col5 lines 35-40).

**Regarding claim 48, 55** Funk discloses the transceiver of claim 42, wherein said processor is further configured to cause said transmit power and said transmission data rate to be reduced when said measured temperature exceeds said threshold temperature (col3 lines 30-65).

**Regarding claim 53**, Funk discloses a mobile station in a radio communication system (reducing heat buildup within a mobile radio device having a radio transmitter, abstract) comprising:

a temperature measuring device for measuring a temperature level in said mobile station (the thermistor 115 of figure 1, col3 lines 13-53);

a processor for selectively modifying a transmit power level or a transmission data rate associated with transmitting data from the mobile station over an air interface responsive to said measured temperature level (control transmission power, col3 lines 46-67). Funk further discloses that transmission power may be reduced (modify a transmit power level) by inserting brief pauses at intervals during the transmission (col4 lines 29-41);

an output device for providing an indication of said modified transmission power (display 117 of figure 1, col3 lines 30-67).

Funk however fails to specifically disclose modifying a transmission data rate associated with transmitting the data from said transceiver based on said comparison. However in a very similar endeavor, Ohno discloses a wireless communication equipment for a remote station having a function for controlling a temperature in the equipment (col1 lines 4-10). Ohno further discloses;

selectively modify a transmission data rate associated with transmitting the data from said transceiver based on said comparison (when a temperature sensor senses that the temperature in the box is higher than a set temperature, the temperature control

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portion changes a transmission rate, col5 lines 40-50). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of modifying the data rate as disclosed by Ohno, into the method and apparatus for reducing power in radio transmitters as disclosed by Funk, in order to have additional means for efficiently reducing the temperature of a transceiver.

**Regarding claim 47, 49, 50, 51, 52, 54** Funk and Ohno fails to specifically disclose causing an indication of said transmission data rate modification to be transmitted to a remote device in the radio communication system. Funk however discloses that a user may be apprised of temperature readings by means of a graphical display (col3 lines 45-51). It would have thus been obvious to a person skilled in the art at the time the invention was made to inform users of changes in transmission data rates as well as transmission power. It would have further been obvious to display such readings as a percentages pertaining to maximum transmission power of the transceiver (radio device) and maximum transmission power allowed by the radio communication system since it is beneficial to a mobile user as what to anticipate when information related to reduction in data transmission is provided.

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 42-55 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN NGO whose telephone number is (571)272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571)272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kwang B. Yao/  
Supervisory Patent Examiner, Art Unit 2416

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